## **REMARKS**

Claims 33-48 are pending. Claims 1-32 are canceled with this Response.

Claims 1-48 were rejected as directed to non-statutory subject matter, based on questionable reliance on a non-precedential decision by the Board of Patents Appeals and Interferences. Applicant respectfully traverses this rejection and disagrees with the statutory subject matter characterization adopted by the Patent Office. That "standard" clearly conflicts with the standard enunciated by the United States Supreme Court in several decisions and by the Court of Appeals for the Federal Circuit in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368, 1372-73 (Fed Cir. 1998):

The plain and unambiguous meaning of § 101 is that any invention falling within one of the four stated categories of statutory subject matter may be patented, provided it meets the other requirements for patentability set forth in Title 35, i.e., those found in § § 102, 103, and 112.... The repetitive use of the expansive term "any" in § 101 shows Congress's intent not to place any restrictions on the subject matter for which a patent may be obtained beyond those specifically recited in § 101. Indeed, the Supreme Court has acknowledged that Congress intended § 101 to extend to "anything under the sun that is made by man." Diamond v. Chakrabarty, 447 U.S. 303, 309, 100 S.Ct. 2204, 65 L.Ed.2d 144 (1980); see also Diamond v. Diehr, 450 U.S. 175, 182, 101 S.Ct. 1048, 67 L.Ed.2d 155 (1981). Thus, it is improper to read limitations into § 101 on the subject matter that may be patented where the legislative history indicates that Congress clearly did not intend such limitations. See Chakrabarty, 447 U.S. at 308, 100 S.Ct. 2204 ("We have also cautioned that courts should not read into the patent laws limitations and conditions which the legislature has not expressed.")

However, solely to advance prosecution of the application, method claims 1-16 have been canceled. The remaining claims are not method claims, so Applicant believes that those claims were not meant by the Patent Office to be rejected on the above-quoted grounds. Method claims 1-16 are canceled without prejudice – Applicant reserves the right to prosecute those claims in this or another application.

The Office Action also rejects software claims 17-32 "because the claimed invention is directed to non-statutory subject matter of a computer program." This sentence implies that a computer program is non-statutory subject matter – a puzzling statement, in light of the succeeding sentence: "A computer program must be claimed as a computer-readable medium encoded with a data structure." In any event, "software" is, by definition, stored on a computer-readable medium with a data structure and run on a computer, and thus cannot be a mere manipulation of an abstract idea. But again, solely to advance prosecution of the application, Applicant has canceled software claims 17-32 without prejudice, reserving the right to prosecute those claims in this or another application.

System claims 33-48 are the only remaining claims. Claims 33-47 stand rejected under 35 U.S.C. § 103 as unpatentable over U.S. Pat. App. 20020007329, to Alcaly et al., in view of an article by Fung et al. entitled: "Benchmarks of Hedge Fund Performance: Information Content and Measurement Biases." This rejection is respectfully traversed.

The Office Action asserts that Alcaly "discloses a method of creating and managing an index fund based on the index of funds of hedge funds." Claim 33 is a system claim, but has a preamble similar to that of claim 1. In any event, Alcaly teaches nothing of the sort. Paragraphs 86-102 discuss only an index of hedge funds. The Office Action is incorrect when it asserts that a "portfolio is created of the funds in the index and capital is allocated to funds in the portfolio" is taught in Alcaly at paragraphs 92-102. Those paragraphs teach only creating an index of hedge funds. At paragraph 11 Alcaly does mention an index fund, but creation of an index fund of hedge funds is not described in sufficient detail as to be enabling. In order to "render a claimed apparatus or method obvious, the prior art must enable one skilled in the art to make and use the apparatus or method." *Beckman Instruments, Inc. v. LKB Produkter AB*, 892 F.2d 1547, 1551 (Fed.Cir.1989); *In re Kumar*, 418 F.3d 1361, 1365 (Fed. Cir. 2005). In any event, claim 33 is directed toward creating a product that is layers of abstraction above an index fund of hedge funds. Claim 33 is directed to a system for creating an index fund of funds of hedge funds – and Alcaly says nothing about that. At best, Alcaly only mentions (and doesn't enable) creating one fund (an index fund) of hedge funds. That is, Alcaly teaches creating an index of hedge funds,

and mentions (but does not enable) creating an index fund based on that index. In contrast, claim 33 is directed to taking many funds of hedge funds (one of which could be an index fund of hedge funds), creating an index of those funds of hedge funds, and then creating an index fund based on that index of funds of hedge funds. This is a process undreamt of by Alcaly.

Fung teaches an index of funds of hedge funds (see, e.g., page 9, section 4.1). However, as explained in the subject specification, Fung does not teach an investable index fund based on an index of funds of funds. In fact, Fung teaches away from such an index fund – see page 5, lines 11-30, esp. lines 14-19, of Applicant's specification.

Also, although (as mentioned in Applicant's specification at page 4) Fung mentions selection bias and survivorship bias, since Fung does not teach (and actually teaches away from) an index fund of funds of hedge funds, Fung does not explain how these biases can be minimized for such an index fund.

Creating a fund from an index of funds is not easy. Creating an index may simply involve measuring the performance of all of the funds being indexed. But creating an index fund based on that index involves selecting funds whose collective performance mirrors that index. The simple, but impractical, approach (taught, for example, by Fung) is to include all of the funds being indexed – but that approach is problematic, and leads to tracking errors (see specification, page 5, lines 25-27). Of course, Fung teaches only an index fund of hedge funds – not an index fund of funds of hedge funds.

In summary, Alcaly teaches only an index of hedge funds. Alcaly does not enable an index fund of hedge funds, and in any event does not teach, or even contemplate, an index of funds of hedge funds.

Fung does mention an index of funds of hedge funds, but teaches away from an index fund based on such an index (and also fails to enable such an index fund).

A prima facie case of obviousness is not presented when the cited prior art fails to enable the claimed invention. See MPEP § 2121.01 ("The disclosure in an assertedly anticipating

reference must provide an enabling disclosure of the desired subject matter; mere naming or description of the subject matter is insufficient . . . .").

Moreover, a *prima facie* case of obviousness is rebutted when the prior art teaches away from the claimed invention. See MPEP 2145(X)(D).

Further, in contrast to the assertion at page 4 of the Office Action, Fung does not teach and enable specific criteria selected so as to minimize biases. Page 1, paragraphs 1-2 say nothing about *minimizing* biases.

And contrary to the assertion at page 5 of the Office Action, Fung says nothing at paragraph 6 on page 1 about identifying potential funds by searching available commercial databases.

Moreover, Fung says nothing at paragraph 4 of page 3 about minimizing bias by selecting funds according to fund size. That paragraph mentions only a fund that stops reporting information "because it has reached the optimal size given its style of trading."

Likewise, Fung says nothing at page 4, paragraph 4 about minimizing bias by selecting funds according to fund track record (claim 39) or fund history (claim 41). That paragraph merely explains what is meant by "instant history" bias.

And Fung does not teach rebalancing a portfolio periodically at page 3, line 6. Fung does mention portfolio rebalancing at *paragraph* 6 of page 3 – but that rebalancing is not done periodically: "the portfolio is rebalanced when a new fund is added to the portfolio or when a fund becomes defunct." "Periodically" means "at regular intervals" – not "when a new fund is added."

Beginning at the bottom of page 4, the Office Action becomes confusing. The test for anticipation of a claim is whether all of the elements of that claim are taught by a single prior art reference. Analogously, the test for obviousness is whether two or more prior art references, when combined, disclose all of the elements of the claim. The test for obviousness is <u>not</u> whether some elements of the claim are in the prior art and other elements "would have been obvious to one with ordinary skill in the art." See MPEP 2143.03: "To establish a *prima facie* 

case of obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art."

In other words, unless Fung (or Fung combined with Alcaly) suggests the limitations of each claim, Fung cannot render that claim obvious. But neither Fung nor Alcaly even suggests "a database storing potential funds for an index of funds of hedge funds," the first element of claim 33 – Fung teaches away from an index fund of funds of hedge funds, and therefore teaches away from a database storing potential funds for such an index fund. Moreover, Fung doesn't suggest using selected funds, but only all of the funds indexed.

Further, even if Fung teaches that selection bias is an "important consideration" in calculating an index, as asserted at page 5 of the Office Action, that doesn't suggest to one skilled in the art that he should identify which of potential funds for an index fund of funds of hedge funds meet specific criteria selected so as to minimize selection bias. If the Patent Office disagrees, an explanation of how such a detailed suggestion exists should be provided.

The above arguments should be more than sufficient to convince the Patent Office that claims 33-47 should not be rejected over Alcaly combined with Fung.

Claim 48 stands rejected over Alcaly combined with Fung and with U.S. Pat. No. 6,829,603, to Chai et al. This rejection is respectfully traversed.

Chai is non-analogous. Indeed, Chai is vastly non-analogous. The abstract from Chai is reproduced below:

This patent describes a novel system, method, and program product that are used in interactive natural language dialog. One or more presentation managers operating on a computer system present information from the computer system to one or more users over network interface(s) and accept queries from the users using one or more known input/output modalities (e.g. Speech, typed in text, pointing devices, etc.). A natural language parser parses one or more natural language phrases received over one or more of the network interfaces by one or more of the presentation managers into one or more logical forms (parsed user input), each logical form having a grammatical and structural organization. A dialog manager module maintains and directs interactive sessions

between each of the users and the computer system. The dialog manager receives logical forms from one or more of the presentation managers and sends these to a taxonomical mapping process which matches the items of interest to the user against the content organization in the content database to match business categories and sends modified logical forms back to the dialog manager.

Thus, Chai is directed to a system for enabling computer users to pose natural language queries. Chai has nothing to do with indexing funds or creating index funds.

"In order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably related to the particular problem with which the inventor was concerned." MPEP 2141.01(a). Chai is neither in the field of Applicant's endeavor (creating an index fund of funds of hedge funds) nor reasonably related to the particular problem with which the inventor was concerned (how to create an investable index fund of funds of hedge funds). Chai merely teaches a system for enabling computer users to pose natural language queries – which would be of no interest to one seeking art related to index funds of funds of hedge funds.

If the Patent Office disagrees and continues to rely upon Chai, Applicant respectfully requests identification of: (a) what the Patent Office believes to be the field of Applicant's endeavor, and (b) the particular problem with which the Patent Office believes Applicant's invention is concerned.

Moreover, there is no suggestion in Chai that it should be combined with Alcaly and Fung, and no suggestion in Fung or Alcaly that they should be combined with Chai. The only apparent reason the Patent Office could have for trying to combine these three disparate references is to try to invalidate claim 48. But the impropriety of using an applicant's claims as a roadmap and motivation for combining references is well-known.

The Office Action does assert: "It would have been obvious to one with ordinary skill in the art to include storing data in a database according to object role modeling because Chai et al teaches such database utilization favorable to queries." Aside from the fact that the test for obviousness is, as discussed above, not what would have been obvious to one skilled in the art, the Patent Office's assertion presupposes that one skilled in the art would be aware of Chai. But since Chai is vastly non-analogous, one skilled in the art of funds of funds would have no reason to know of Chai.

The above arguments are believed to be more than sufficient to convince the Patent Office that the rejection of claim 48 should be withdrawn.

No statements made herein are intended to reduce the scope of the claims beyond that dictated by the plain wording of the claims themselves. Arguments regarding claim limitations are intended to apply only to claims explicitly possessing those limitations.

Applicant respectfully notes that it is improper to ignore arguments made in response to office actions. See MPEP § 707(f): "Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it."

No fee is believed to be due with this Response (other than the extension fee authorized above). However, if any other fee is due, please charge that fee to Deposit Account No. 50-0310.

Respectfully submitted,

Dated September 21, 2005

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